

## SOLAR PROMINENCE ACTIVITY.

[Reprinted from *Nature*, London, Jan. 6, 1923, p. 27.]

Every half year the Kodaikanal Observatory, India, issues a bulletin giving a summary of prominence observations during that period. The data for the first half of the present year [1922], in Bulletin No. LXX, have just been received. The mean daily areas and daily numbers of the prominences are few, as was to be expected from the cyclical nature of the phenomena, the respective figures being 3.17 (square minutes) and 11.05. Their distribution in latitude shows maxima in the belt  $45^{\circ}$ - $50^{\circ}$  in both hemispheres, and is very similar to that for the previous half year; this indicates that a new cycle of activity has begun in the higher zones of prominences. The statistics give further the distribution of prominences east and west of the sun's axis, the activity of the metallic prominences, particulars of the displacements of lines observed in the spectra of the chromosphere and prominences, reversals and displacements of H<sub>a</sub> and D<sub>2</sub>, and finally, areas and numbers of prominences projected on the disc as absorption markings. These valuable data are of great importance because they provide a complete record of the activity of the sun from a prominence point of view on a homogeneous system.

## RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Meteorologist in Charge of Library.

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

## Béron, Pierre.

Météorologie simplifiée par l'application de la loi physique au mode de la production: 1<sup>o</sup> de la chaleur terrestre par celle du soleil; 2<sup>o</sup> des courants maritimes; 3<sup>o</sup> des saisons avec les climats; 4<sup>o</sup> des vents avec les pluies; et 5<sup>o</sup> de l'électricité avec l'état magnétique; ouvrage indispensable aux marins. Paris. 1863. p. 723-944. illus. 22 $\frac{1}{2}$  cm. [Extr.: L'Electrologie, nov.-déc.]

## Beveridge, William H.

Wheat prices and rainfall in western Europe. [London.] 1922. p. 412-478. plates (fold.) 21 $\frac{1}{2}$  cm. (Repr.: Journal Royal statistical society. v. 85, pt. 3. May, 1922.)

## Bianconi, Gian Antonio.

Sul clima d'Europa all'epoca glaciale. Bologna. 1872. 28 p. 29 $\frac{1}{2}$  cm.

## Bigelow, Frank Hagar.

Treatise on the sun's radiation. Supplement no. 4. Atmospheric radiation, electricity, and magnetism. Vienna. 1922. viii, 89 p. illus. 23 cm.

## Braak, C.

On cloud-formation. Nuclei of condensation, haziness, dimensions of cloud-particles. Batavia. 1922. 33 p. 27 cm. (K. Mag. en met. observ. Batavia. Verh. No. 10.)

## Castrillón, Álvarez.

Recorrència mitjana de l'estat higromètric a l'observatori Fabra. Barcelona. 1922. 8 p. illus. plate. 22 cm. (Servei meteorològic de Catalunya. Notes d'estudi. N.<sup>o</sup> 10.)

## Colombia. Observatorio meteorológico nacional del colegio de San Bartolomé.

Discursos leídos en su inauguracion el dia 24 de Septiembre de 1922. Bogotá. 1922. 18 p. plates. 24 cm.

## BACK NUMBERS OF THE REVIEW WANTED.

In order to complete file sets and volumes for binding, the following issues of the MONTHLY WEATHER REVIEW and SUPPLEMENTS are earnestly desired. If any recipients of the REVIEW do not care to retain their copies, they will confer a favor by notifying the Chief of Bureau, Weather Bureau, Washington, D. C., who will be glad to forward necessary franks for the mailing of the issues listed below:

1914.

February, March, April, October, and December.

1915.

All months *excepting* January, October, and November.

1916.

January, February, June, August, September, and October.

1918.

February, August.

1919.

August.

1921.

March, June, July, August, October, and November.

1922.

March, April.

SUPPLEMENT Nos. 1, 2, and 3.

## BIBLIOGRAPHY.

## Defant, Albert.

Ausstrahlung, nächtliche Abhöhlung und Bewölkung. p. 99-108. 25 cm. (Extr.: Geografiska annaler. H. 1. 1922.)

Die Bestimmung der Turbulenzgrößen der atmosphärischen Zirkulation aussertropischer Breiten. Wien. 1921. p. 383-403. figs. 24 $\frac{1}{2}$  cm. Extr.: Sitzungsber. Akad. der Wissensch. Mathem.-naturw. Klasse. Abt. IIa. Bd. 130, H. 7-8, 1921.)

Die Zirkulation der Atmosphäre in den gemäßigten Breiten der Erde. p. 209-266. figs. 25 cm. (Extr.: Geografika annaler. H. 3. 1921.)

## Dujardin.

La chaleur et l'humidité à la surface de la terre. Paris. 1867. 96 p. illus. 15 cm.

## Eichthorn, A.

Die klimatischen Verhältnisse von Lüneburg. Nach den Beobachtungen der hiesigen meteorologischen Station. Lüneburg. 1922. 39 p. illus. 22 $\frac{1}{2}$  cm.

## Errulat, F.

Die Fernwirkungen der Explosion von Rothenstein bei Königsberg i Pr. am 10. April 1920 mit besonderer Berücksichtigung der Bodenerschütterungen. 59 p. illus. plates. 25 $\frac{1}{2}$  cm. (Mitt. Geol.-paläontol. Inst. und der Bernsteinsamml. der Univ. Königsberg i Pr. N. F. Nr. 25.) (Schriften d. Physik.-ökonom. Gesellschaft. Jahrg. 63, 1922.)

## Febrer, Joaquim.

Pluges a Catalunya durant l'any meteorològic de 1920-1921. Barcelona. 1922. 8 p. illus. 22 cm. (Servei meteorològic de Catalunya. Notes d'estudi. N.<sup>o</sup>. 9.)

Pluges a Catalunya durant la primavera de 1922. Barcelona. 1922. 8 p. illus. 23 cm. (Servei meteorològic de Catalunya. Notes d'estudi. N.<sup>o</sup>. 11.)

## Fischer, Hanns.

Die Wunder des Welteises. Eine gemeinverständliche Einführung in die Welteislehre Hanns Hörbigs. Berlin-Wilmersdorf. 1922. 104 p. illus. 19 $\frac{1}{2}$  cm.